

Title (en)
Process and electrode system for determining an analyte or an oxidoreductase as well as suitable compounds

Title (de)
Verfahren und Sensorelektrodensystem zur elektrochemischen Bestimmung eines Analyts oder einer Oxidoreduktase sowie geeigneter Verbindungen

Title (fr)
Procédé et système à électrodes pour la détermination électrochimique d'un analyte ou d'une oxidoréductase ainsi que des composés appropriés

Publication
EP 0441222 B1 19961218 (DE)

Application
EP 91101114 A 19910129

Priority
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Abstract (en)
[origin: DE4003194A1] (A) The determin. of an analyte (I) comprises electrochemical reaction in the presence of an oxido-reductase (II) and a reducible substance (III) which, in the course of the reaction, transfers electrons from (II) to an electrode, thus giving rise to a signal which is a measure of (I). (III) is enzymatically reduced. Oxidn. occurs on the electrode, with the substance produced by this oxidn. being different from the original (III). (B) A substance which is capable of taking up electrons from a (II) to form an electron-rich aromatic amine can be used as an electron carrier between a (II) and an electrode in an electrochemical system. (C) A sensor electrode system for the electrochemical determin. of (I) in which a sample contains at least 2 electrically conducting agents which are isolated from each other and which are each brought into electrical contact with the sample (I) via an electrically conducting surface, so that at least one of these surfaces is in contact with a (II) and a (III) which is capable of transferring electrons between the (II) and the surface. The (III) used is a cpd. which, after redn. by (II) can be oxidised on the surface to give a substance different to the original (III).

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